

U.S. Patent Application Serial No. **10/646,818**
Amendment filed March 27, 2006
Reply to OA dated December 27, 2005

REMARKS:

Claims 1-9 are currently pending. Claims 1-5 are currently being considered, none of which have been amended herein. Claims 6-9 have been withdrawn from consideration.

Some of the differences between **Matsushita '604** and the subject application are discussed herein below.

First, in the case of USP 6,640,604 (**Matsushita '604**), a thin metal plate as a work piece is supported by a material support jig 4, as is shown in FIG. 1 of **Matsushita '604**. Then, laser irradiation is performed by scanning the laser beam across the width (not in a longitudinal direction) of the workpiece in order to bend the workpiece in a longitudinal direction as is clear from FIG. 3 of **Matsushita '604**.

On the other hand, according to the subject application, laser irradiation is performed by scanning the laser beam in a longitudinal direction and approximately in parallel with the longitudinal edges of the workpiece in order to bend the workpiece in a longitudinal direction as is depicted in Figs. 10A, 11, and 12.

Second, in case of the subject application, the combined characters are sequentially irradiated. As the transmission pitch is "0", substantially a laser beam of the combined shape of the characters

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is irradiated. (See page 22, lines 9-11 of the specification of the subject application). **Matsushita**
'604 fails to disclose this feature of the subject application.

Scan of the laser marker can be set freely, although the size of the dot differs in accordance with energy, it is possible to cause a thermal deformation in approximately 6 mm. Scan is defined as to irradiate the laser beam by moving the dot using a galvano scanner mirror as is shown in Figs. 11 and 12. Character is defined as a line which is drawn by a continuous scan. (See page 18, line 5 to page 20, line 10 of the specification of the subject application).

Namely, combined shape of two characters are depicted in Fig. 11. The squares drawn by dotted lines indicate an area irradiated by one character, it is possible to continuously irradiate a laser beam in a state of a pitch "0" as is set forth in page 11, line 13 of the specification of the subject application.

Each one of C2 to C11 in Fig. 8 indicates one character, and each one of C12 to C15 indicates combined shape of characters. The squares drawn by dotted lines can be set freely as long as the laser beam reaches. For example, it is possible to set the squares drawn by dotted lines as depicted in Figs. 5 and 6. In the case of Fig. 5, the combined shape of two characters are irradiated. In the case of Fig. 6, not all the characters are irradiated all the time, but desired characters are

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selected and combined shape of the desired characters are irradiated in accordance with the desired roll angle and pitch angle.

The Office Action mailed December 27, 2005 was a premature final Office Action, because independent claims 3-5 were rejected under a new ground of rejection (35 USC 112) even though claims 3-5 were not amended after the previous Office Action. Thus, Applicants respectfully request that the finality of the last Office Action be withdrawn.

Claims 1-5 stand rejected under the second paragraph of 35 USC 112 as being indefinite.

Applicants respectfully traverse this rejection, for the following reasons.

The Examiner has argued that an amendment to independent claims 1 and 2 filed on October 24, 2005 regarding “a combined shape of characters” has caused the scope of all independent claims 1-5 to be unclear.

Applicants respectfully submit that the Examiner should withdraw the rejection of claims 3-5 under the second paragraph of 35 USC 112 because: claims 3-5 are independent claims; this 112 rejection was not made in the previous Office Action; claims 3-5 were not amended after the

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previous Office Action; and claims 3-5 are definite and are clearly described.

Additionally, in view of the above, it is respectfully submitted that claims 1 and 2 are clearly described and are definite.

Thus, Applicants respectfully submit that the rejection of claims 1-5 under the second paragraph of 35 USC 112 should be withdrawn.

Claims 1-5 stand rejected under 35 USC 103(a) as obvious over USP 6,640,604 (**Matsushita '604**). Claims 1-5 stand rejected under 35 USC 103(a) as obvious over Alleged Admitted Prior Art in view of **Matsushita '604**.

Applicants respectfully traverse the above two rejections of claims 1-5 under 35 USC 103(a), for the following reasons.

Matsushita '604 and alleged admitted prior art, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 1: “wherein the laser beam is a combined shape of characters”, in combination with the other claimed features.

Matsushita '604 and alleged admitted prior art, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 2: “wherein the laser beam is a combined shape of characters”, in combination with the other claimed features.

Matsushita '604 and alleged admitted prior art, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 3: “selecting an irradiation shape combination corresponding to either one of or both the load adjustment amount and the angle adjustment amount”, in combination with the other claimed features.

Matsushita '604 and alleged admitted prior art, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 4: “an XY axis is set around the head mounting portion, an area I to an area IV are formed on the XY coordinates with the X axis as a gimbal longitudinal direction, and the laser beam irradiation area for correcting the angle in plus or the laser beam irradiation area for correcting the angle in minus is set in the area I and the area III or the area II and the area IV respectively”, in combination with the other claimed features.

Matsushita '604 and alleged admitted prior art, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 5: “a boundary is provided in a direction

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orthogonal with a gimbal longitudinal direction around the spring, a first area is formed at the head mounting side, a second area is formed at the opposite side, the laser beam irradiation area for correcting the pitch angle in plus is set in the first area, and the laser beam irradiation area for correcting the pitch angle in minus is set in the second area”, in combination with the other claimed features.

Thus, Applicants respectfully submit that the above two rejections of claims 1-5 under 35 USC 103(a) should be withdrawn.

In view of the aforementioned remarks, all claims currently being considered are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due or in the future with respect to this application, to Deposit Account No. 01-2340.

Respectfully submitted,
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